

STATE OF UTAH  
DEPARTMENT OF HEALTH

DIVISION OF ENVIRONMENTAL HEALTH

150 West North Temple, P.O. Box 2500, Salt Lake City, Utah 84110

Alvin E. Rickers, Director  
Room 426 801-533-6121

533-6146  
August 20, 1980

WATER POLLUTION CONTROL  
DESIGN/EVALUATION  
PLANNING  
MONITORING  
ENFORCEMENT

RE: Amended Wastewater Construction Permit  
Escalante Silver Mine  
Enterprise, Utah

Dear Mark:

We have reviewed the plans and design criteria for the tailings facilities and ponds contained in the 3 volume Notice of Intention to Commence Mining Operations at the Escalante Silver Mine near Enterprise, Utah.

As a result of our review we find the plans to be in conformance with the Utah Wastewater Disposal Regulations and approve them for inclusion as part of our construction permit of March 7, 1980 which was issued at that time for minewater discharge from the Escalante Silver Mine. This part of the construction permit is issued subject to the following considerations:

1. The tailings pond will be located about  $1\frac{1}{2}$  mile west of the mill in a natural basin, three miles from the nearest irrigation well and four miles from the nearest habitation. The dam for the pond will be constructed in 3 stages and as shown on drawing E1045-47-4202-A:

Stage 1:

Pond Capacity	$20 \times 10^6 \text{ ft}^3$
Surface Area	33 ac
Embankment Height	37 ft.

Stage 2:

Pond Capacity	$40 \times 10^6 \text{ ft}^3$
Surface Area	48 ac
Embankment Height	47 ft

Stage 3:

Pond Capacity	$60 \times 10^6 \text{ ft}^3$
Surface	58 ac
Embankment Height	55 ft.

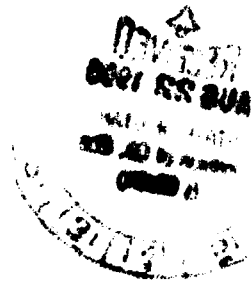
James O. Mason, M.D., Dr.P.H.  
Executive Director  
801-533-6111

DIVISIONS

Community Health Services  
Environmental Health  
Family Health Services  
Health Care Financing  
and Standards

OFFICES

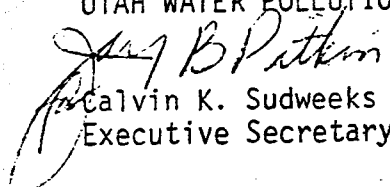
Administrative Services  
Health Planning and  
Policy Development  
Medical Examiner  
State Health Laboratory



2. Tailings will be moved from the mill to the pond by a 4 inch diameter tail line and water from the pond will be returned to the mill via a screened reclaim riser and 4 inch reclaim line. The mill, ancillary facilities and tailings pond are designed for zero discharge of wastewater utilizing liners, concrete containment facilities and collection basins. Tests indicate no tailings or tailings solution will find their way into the groundwater.
3. The perimeter of the tailings pond will be fenced with 8' high hogwire fencing, and monitoring wells will be installed to the groundwater table, three wells downstream and one upstream (300 to 350 feet deep). This permit is issued subject to the Utah Bureau of Water Pollution Control receiving test results taken at these monitoring wells on parameters shown on page 19 of Volume 2.
4. The pond will be lined from existing earth materials at the site as described in page 14 of Volume 2 of the Notice of Intentions to minimize leakage and provide a safeguard against potential groundwater degradation.

Sincerely,

UTAH WATER POLLUTION COMMITTEE

  
Calvin K. Sudweeks  
Executive Secretary

EHP:laf

cc: Southwestern District Health Department